

ICT in Education in São Tomé and Príncipe

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Source: *World Fact Book*¹

Please note:

This short *Country Report*, a result of a larger *infoDev*-supported *Survey of ICT in Education in Africa*, provides a general overview of current activities and issues related to ICT use in education in the country. The data presented here should be regarded as illustrative rather than exhaustive. ICT use in education is at a particularly dynamic stage in Africa; new developments and announcements happening on a daily basis somewhere on the continent. Therefore, these reports should be seen as “snapshots” that were current at the time they were taken; it is expected that certain facts and figures presented may become dated very quickly.

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It is expected that individual *Country Reports* from the *Survey of ICT and Education in Africa* will be updated in an iterative process over time based on additional research and feedback received through the *infoDev* web site. For more information, and to suggest modifications to individual *Country Reports*, please see www.infodev.org/ict4edu-Africa.

Overview

The government of São Tomé does not consider ICT to be a priority sector, and there is currently no specific policy that addresses ICTs. Internet service is not yet liberalised, but there is some restructuring of telecommunications infrastructure underway.

Country Profile

The Democratic Republic of São Tomé and Príncipe consists of two islands and four islets. The country took its name after those islands, which are located on the west of the African continent in the Gulf of Guinea. The das Rolas islet is the most important of the four and is situated in south of the island of São Tomé. This South Atlantic archipelago is 350 kilometres from the Gabonese coast. The surface area of São Tomé is 859 square kilometres and that of Príncipe is 142 square kilometres for a total of 1001 square kilometres. The distance between the two islands is about 160 kilometres.²

São Tomé and Príncipe is a former Portuguese colony with 133,600 inhabitants (2005) and a population density ranging from 3.145 people per square kilometre in Agua Grande to 21 per square kilometres in Caué. Over half (54.5%) of the population is concentrated in urban zones, leaving 45.5% in rural zones.

The economic structure is characterised by a strong dependence on outside sources and on cacao, the sole export product.

Table 1 provides some selected socio-economic indicators for the country.³

Table 1: Socio-economic Indicators: São Tomé and Príncipe

Indicator	
Population	133,6000
GNP per capita	290
Televisions per 1,000 people	228
Radios per 1,000 people	318
Fixed telephone lines per 1,000 people	36
Internet users	9,000

The Education System

The National Action Plan that has been developed is seen as a mechanism for strategic action for reaching the Millennium Development Goals. However, the implementation of the plan will require an infusion of resources from international partners.

Formal education⁴

The education system in São Tomé and Príncipe, currently regulated by LSBE-Decree-Law #53/88, has long suffered from multiple modifications. This system consists of the five following sub-systems:

- General schooling, with pre-school, elementary school, secondary school, special and professional school
- Professional and technical education
- Training and improvement of teaching executives
- Adult education
- Higher education

Table 2 summarises some basic education data.

Table 2: Education Data (2004)

Indicator	
Primary completion rate, total (% of relevant age group)	74.9
School enrolment, primary (% gross)*	132.9
School enrolment, secondary (% gross)*	40.2
Ratio of girls to boys in primary and secondary (%)**	99.3

*Percent of gross is the number enrolled as a percentage of the number in the eligible age group.

**Ratio of girls to boys is the percentage of girls to boys enrolled at primary and secondary levels in public and private schools.

Non-formal education

There are several initiatives and approaches in the non-formal education domain. São Tomé has a national radio station that broadcasts 17 hours a day and a national television channel that broadcasts five to six hours a day. As well, since 1999, a new regional radio station on Príncipe has started broadcasting.⁵

In these initiatives, the educational activities oriented towards literacy are a means to giving a fresh start to rural development objectives.

ICT Policies

There is currently no specific policy that addresses ICT in São Tomé and Príncipe.

Infrastructure

Telephones

The international telephone network is connected via an underground system called INTELSAT. The main operator for fixed telephone lines is Companhia Santomense de Telecomunicações (CST), which is 5% controlled by Portugal Telecom

(<http://www.cstome.net/>). The number of fixed telephone lines in 2003 was 7,000, with a density of 4.6%.

The main mobile phone service provider is Portugal Telecom. The number of mobile phone subscribers is 4,800, with a density of 3.17%. Competition was supposed to open in 2006 for the mobile telephone market in São Tomé and Príncipe.

Internet

Internet service access is not yet liberalised, in contrast with the majority of African countries.⁶

CST is currently the main Internet service provider. It operates through TELEPAC, a branch of Portugal Telecom. It also offers connections through Wi-Fi. With local and Swedish funds, Bahnhof ST (<http://www.bahnhof.st/index.html>) is going to offer wireless access from an underground station. It already offers electronic message service and Internet site hosting.

Table 3 summarises the Internet connection data of the country.

Table 3: Internet Connection

Indicator	
Number of Internet service providers	1
Technologies used	RTC, Wi-Fi
Number of servers per 10,000 people	62.5
Total number of Internet users	20,000
Users per 100 people	12.2

The restructuring of the telecommunications sector is in progress. CST lost its monopoly over Internet service and data transmission in 2004 and over the fixed and mobile telephones in December 2005.

ICTs in Education

The Polytechnic Institute (Institut Supérieur Polytechnique) is the only public school at the tertiary level. The institute has a computer laboratory.

There are about 30 computers in the institute, 20 of which are quite recent and installed in two rooms (12 in one room and eight in another). The room with eight computers is connected to the Internet. The two rooms are supervised by foreign co-operation assistant teachers working with local teachers. These rooms are especially reserved for computer classes that are part of the syllabus for all training sections. The syllabus ranges from word processing to the use of the Internet as a research tool. The two rooms can host up to 40 students at one time pairing up.

There is no fax machine at the national high school. Instead, it has a special 28 kbps line connection to Internet. The e-mails are often lost in the network, and communication is difficult. By and large, there is now a political will to extend the network and develop the technical capacities in the country and especially in the schools. In this regard, the Netescolas project envisions to upgrade the high school Internet connection to 64 kbps⁷

Bahnhof ST offers free online training to all qualified students through the Bahnhof ST Internet School.

Current ICT Initiatives and Projects

The government does not consider ICT to be a priority sector. Nevertheless, these technologies offer an essential instrument for sharing information and knowledge, paramount for efficient and modern management of the limited resources of the country, essential conditions to a good governance.

The strategic objectives of the government are to transform ICT into a service instrument used to reduce poverty and to attain the Millennium Development Goals. In the perspective of this political choice, one can include UNESCO's Participation Programme which has run for about 10 years and extends to formal and non-formal education. This programme, designed to provide direct assistance to initiatives undertaken by member states in the organisation's fields of competence, in line with priorities determined by the countries themselves, included a communication project in São Tomé and Príncipe from 1994 to 2003. The project was designed to use radio transmissions for improving formal and non-formal education and animating school-community interactions.⁸

The government expects to conduct a study for connecting São Tomé and Príncipe to a network of underwater optical fibres. This is a way for the country to reduce the costs and improve the quality of access to telecommunications. This connection will allow the transformation of the country into a service centre for the region and the creation of infrastructure conditions that will attract private investment into the country.

Implementing ICT in Education: What Helps and What Hinders?

Table 4 provides a summary of the current stage of ICT development in São Tomé and Príncipe in terms of enabling or constraining features in the education system.

Table 4: Factors Influencing ICT Adoption

Factors	Enabling Features	Constraining Features
<i>Policy framework and implementation</i>		There is no specific policy that addresses ICT.
<i>Advocacy leadership</i>		ICT is not a priority sector.
<i>Gender equity</i>		There is gender inequity for access to

Factors	Enabling Features	Constraining Features
		ICT.
<i>Infrastructure and access</i>		Internet service access is not yet liberalised
<i>Policy and collaborating mechanisms</i>	The strategic objectives of the government are to transform ICT into a service instrument used to reduce poverty and to attain the Millennium Development Goals through popularising ICT.	
<i>Fiscal resources</i>		There are high taxes placed on computers and connectivity.

General References

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Notes

- 1 The World Factbook 2007. <https://www.cia.gov/cia/publications/factbook/geos/tp.html>
- 2 http://fr.wikipedia.org/wiki/S%C3%A3o_Tom%C3%A9-et-Principe
- 3 Observatory of ITC Policy in Africa. <http://afrique.droits.apc.org>
- 4 Democratic Republic of Sao Tome and Principe. Ministry of Education and Culture-Universal Education/National Action Plan 2002-2015. Document certified November 18, 2002.
- 5 Democratic Republic of Sao Tome and Principe. <http://unpan1.un.org/intradoc/groups/public/documents/UN/UNPAN023284.pdf>
- 6 Sao Tome. http://www.novatech-proinvest-eu.org/fiches_pays/Fiche_Sao_Tome_Novatech.pdf
- 7 São Tomé & Príncipe. www.sao-tome.st/filemanager/download/1
- 8 UNESCO's past projects in the field of Communications and Information. http://portal.unesco.org/en/ev.php-URL_ID=31007&URL_DO=DO_TOPIC&URL_SECTION=201.html

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